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EXAMINER
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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/685,372
Filing Date: October 14, 2003
Appellant(s): BI ET AL.

MAILED
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GROUP 2600

Roland K. Bowler II
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed January 9, 2006 appealing from the Office action mailed 8/18/2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,504,827	KUO et al.	1-2003

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) The invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 7-10, 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Kuo et al. US 6,504,827.

Regarding claims 1, 7, 9-10 and 15, the claimed limitation of determining that a wireless communications device has discontinued transmission on an allocated channel is disclosed by discontinuous transmission technique in forward link. See column 1, lines 32-57, column 3, lines 64-67, column 4, and lines 1-15. The claimed limitation of extending the channel allocation to the wireless communications device after determining that wireless communications discontinued transmission is disclosed by base station (Figure 1, element 14-i) sending positive forward transmit flag in frame f indicating to mobile telephone that data will be transmitted in frame f+q over assigned F-SCH. The claimed limitation of terminating the channel allocation if channel allocation is not extended is disclosed by base station transmits negative forward transmit flag at frame f indicating that not data will be transmitted over assigned F-SCH. See Figures 4-5, 7-8, column 4, lines 10-56, columns 5-6 (the reverse link). Kuo et al. discloses the decision whether to transmit a positive or negative flag indicating to transmit or not transmit data is determined using knowledge of available spectrum resources. Thus, Examiner interprets the claimed terminate a channel allocation if the channel allocation is not extended with Kuo's disclosure of negative flag to mobile station to indicate no extension of use of R-SCH after bursty transmission, this determination made because there are not available resources (terminating the channel allocation).

Regarding claims 2, 7 and 9, the claimed limitation of transmitting transmission rate control information to wireless communications device to which channel is allocated and extending channel allocation using transmission rate control information is disclosed by the discontinuous data transmission technique involving transmission of a flag over a control channel to indicate to recipient that transmitter has data frame to transmit and transmitter would not transmit unless recipient has indicated via another flag over a control channel in opposite direction that it is ready to receive. See column 1, lines 33-50. Examiner would like to point Applicant's attention to page 11 of instant specification referring to rate control information that is transmitted to wireless communication device being a single bit having a polarity attribute (positive or negative) indicating extension of channel. Examiner believes this is taught in Kuo et al. with use of flags or indicate bits to mobile station where a positive forward transmit flag having a value of 1 is transmitted to indicate mobile station can transmit data to base station and a negative flag with value of 0 means no data can be sent. See column 5, lines 40-46, lines 62-67, and column 6, lines 1-9.

Regarding claims 3 and 8, the claimed limitation of not extending the channel allocation by not transmitting transmission rate control information is disclosed by flag not sent by base station to mobile station with bad RF conditions existing between itself and mobile station. See column 4, lines 52-67, column 5, and lines 1-7. Examiner would like to point Applicant's attention to page 11 of instant specification referring to rate control information that is transmitted to wireless communication device being a single bit having a polarity attribute (positive or negative) indicating extension of channel. Examiner believes this is taught in Kuo et al. with use of flags or indicate bits to mobile station where a positive forward transmit flag having a value of 1 is transmitted to indicate mobile station can transmit data to base station and a negative flag with value of 0 means no data can be sent. See column 5, lines 40-46, lines 62-67, and column 6, lines 1-9.

(10) Response to Argument

Examiner agrees with details of the reference, Kuo et al., and the instant application, as provided by Appellant. However, the arguments regarding the art rejections are not persuasive for the following reasons:

In the section "Discussion of Claim 1", Appellant argues that, contrary to Examiner's assertion, the reference Kuo et al. fails to disclose or suggest the claim subject matter of claim 1. Specifically, Appellant contends that the reference, Kuo et al., does not disclose or discuss determining whether a mobile terminal has discontinued transmission on an allocated channel, that the sending of a flag in Kuo et al. merely indicates when data will be sent by the network to the mobile which is not the same as extending a channel allocation.

Examiner respectfully disagrees. Examiner contends Kuo et al. discloses base station (claimed wireless communications device) using a discontinuous transmission technique with a mobile terminal (Figure 2, element 16-K) on a reverse link (Figure 5, element 22) to account for the bursty nature of data transmission. See column 5, lines 28-31 and lines 36-40. The base station uses the forward dedicated control channel to transmit reverse receive flags or indicator bits to indicate to mobile terminal that base station is ready to process data over reverse supplemental communication channel R-SCH. See column 5, lines 40-46. Examiner interprets determining the claimed wireless communications device has discontinued transmission on an allocated channel with Kuo's disclosure of bursty nature of data transmission from mobile station (claimed wireless device that has discontinued transmission on reverse supplemental communication channel R-SCH) to base station and discontinuous transmission technique to resolve this issue. The technique involves a flag being sent in order for data to continue again between the base station and mobile station. Examiner interprets bursty data to mean the mobile station has discontinued transmitting to base station on its reverse communication channel for some amount of time.

Appellant argues, in Kuo et al., the network sends the flag after determining when data will be sent to mobile station over downlink by base station or when data will be sent by mobile station over uplink to base station, not after determining that the mobile station has discontinued transmission on a previously allocated channel.

Examiner respectfully disagrees. Examiner would like to reassert that Kuo et al.'s invention is directed towards bursty data transmission between the mobile station and base station. Examiner interprets bursty data to mean the mobile station has discontinued transmitting to base station on its reverse communication channel R-SCH for some amount of time and thus teaches claimed subject matter involving determining that mobile station has discontinued transmission. See column 5, lines 28-31 and lines 36-40. The base station uses the forward dedicated control channel to transmit reverse receive flags or indicator bits to indicate to mobile terminal that base station is ready to process data again over reverse supplemental communication channel R-SCH. See column 5, lines 40-46. Regarding the issue of determining discontinued transmission on a previously allocated channel, Examiner contends that data between the mobile station and base station is transmitted over the reverse supplemental channel R-SCH and due to the bursty or discontinuous nature of the transmission, base station is sending an indicator flag or bit to indicate to mobile station it can resume transmitting over that same R-SCH. Thus, it is the previously used reverse supplemental communication channel that will be used if mobile station has data to send after receiving indicator flag or bit.

Appellant argues Kuo et al. also fails to terminate a channel allocation if the channel allocation is not extended. Examiner respectfully disagrees. Kuo et al. discloses base station that transmits negative flag having value of 0 to indicate to mobile telephone to not to transmit data over mobile terminal's R-SCH. Additionally, Kuo et al. discloses the decision whether to transmit a positive or negative flag indicating to transmit or not transmit data is determined using knowledge of available spectrum resources. Thus, Examiner interprets the claimed limitation, "terminate a channel allocation if the channel allocation is not extended", with Kuo's disclosure of negative flag to mobile station to indicate no extension of use of R-SCH after bursty transmission, this determination is made because there are no available resources (terminating the channel allocation).

Thus, rejection of claim 1 is proper.

In the Section titled "Allowability of Claim 2", Appellant argues that, contrary to Examiner's assertion, the flag in Kuo et al. merely indicates when data will be sent and does not make any reference to controlling the transmission rate or extending a channel allocation using transmission rate control information.

Examiner respectfully disagrees. Examiner would like to point Appellant's attention to page 11 of instant specification referring to rate control information that is transmitted to wireless communication device being a single bit having a polarity attribute (positive or negative) indicating extension of channel. Examiner believes this is taught in Kuo et al. with use of flags or indicate bits to mobile station where a positive forward transmit flag having a value of 1 is transmitted to indicate mobile station can transmit data to base station and a negative flag with value of 0 meaning no data can be sent. See column 5, lines 40-46, lines 62-67, and column 6, lines 1-9.

Thus, rejection of claim 2 is proper.

In the Section titled "Allowability of Claim 3", Appellant argues that, contrary to Examiner's assertion, in Kuo et al. the failure to send the flag merely indicates that data will not be sent. Additionally, Appellant argues the flag in Kuo et al. has no relation to the transmission rate or to extending a previously allocated channel.

Examiner respectfully disagrees. Examiner would like to point Appellant's attention to page 11 of instant specification referring to rate control information that is transmitted to wireless communication device being a single bit having a polarity attribute (positive or negative) indicating extension of channel. Examiner believes this is taught in Kuo et al. with use of flags or indicate bits to mobile station where a positive forward transmit flag having a value of 1 is transmitted to indicate mobile station can transmit data to base station and a negative flag with value of 0 means no data can be sent. See column 5, lines 40-46, lines 62-67, and column 6, lines 1-9.

Regarding the issue of extending a previously allocated channel, Examiner contends that data between the mobile station and base station is transmitted over the reverse supplemental channel R-SCH and due to the bursty or discontinuous nature of the transmission, base station is sending an indicator flag or bit to indicate to mobile station it can resume transmitting over that same R-SCH. Thus, it is the previously used reverse supplemental communication channel that will be used if mobile station has data to send after receiving indicator flag or bit.

Thus, rejection of claim 3 is proper.

In the Section titled "Allowability of Claim 7", Appellant argues that Kuo et al. does not disclose determining whether mobile terminal has discontinued transmission on a previously allocated channel or resource, thus there is no suggestion in Kuo et al. to monitor a data control channel to determine that mobile has discontinued transmission.

Examiner respectfully disagrees. Examiner contends Kuo et al. discloses base station (claimed wireless communications device) using a discontinuous transmission technique with a mobile terminal (Figure 2, element 16-K) on a reverse link (Figure 5, element 22) to account for the bursty nature of data transmission. Examiner interprets bursty data to mean the mobile station has discontinued transmitting to base station on its reverse communication channel for some amount of time. See column 5, lines 28-31 and lines 36-40. The base station uses the forward dedicated control channel to transmit reverse receive flags or indicator bits to indicate to mobile terminal that base station is ready to process data over reverse supplemental communication channel R-SCH. See column 5, lines 40-46. The base station then checks mobile terminal's reverse dedicated control channel for response from mobile to flag. Mobile station can respond by indicating it is ready to transmit or does not have data to transmit. See column 5, lines 65-67 and column 6, lines 1-21. Examiner interprets the claimed monitoring a data control channel to determine that the claimed wireless communications device has discontinued transmission with Kuo et al.'s disclosure of bursty nature of data transmission from mobile station (claimed wireless device that has discontinued transmission on reverse supplemental communication channel R-SCH) to base station and discontinuous transmission technique involving indications or flags being sent over F-DCCH and R-DCCH between devices to determine whether to continue data transmission again.

Appellant argues Kuo et al. also does not disclose determining whether to maintain a channel allocation based on determining that the mobile has discontinued transmission.

Examiner respectfully disagrees. Examiner interprets determining the claimed wireless communications device has discontinued transmission on data channel with Kuo et al.'s disclosure of bursty nature of data transmission from mobile station (claimed wireless device that has discontinued transmission on reverse supplemental communication channel R-SCH) to base station and discontinuous transmission technique to resolve this issue. The technique involves a flag being sent in order for data to continue again between the base station and mobile station. Examiner interprets bursty data to mean the mobile station has discontinued transmitting to base station on its reverse communication channel for some amount of time. See column 5, lines 28-31 and lines 36-40. Examiner interprets the claimed determining whether to maintain a channel allocation as the base station using the forward dedicated control channel to transmit reverse receive flags or indicator bits to indicate to mobile terminal that base station is ready to process data over reverse supplemental communication channel R-SCH. See column 5, lines 40-46. Kuo et al. discloses the decision whether to transmit a positive or negative flag indicating to transmit or not transmit is determined using knowledge of available spectrum resources. The base station then checks mobile terminal's reverse dedicated control channel for response from mobile to flag. Mobile station can respond by indicating it is ready to transmit or does not have data to transmit. See column 5, lines 65-67 and column 6, lines 1-21. Thus, Examiner interprets the claimed determining whether to maintain a channel allocation with Kuo's disclosure of transmission of positive or negative flag to mobile station to indicate extension or no extension of use of R-SCH after bursty transmission, this determination made based on available resources.

Thus, rejection claim 7 is proper.

In Section titled "Allowability of Claim 8", Appellant argues Kuo et al. does not disclose determining whether mobile terminal has discontinued transmission on a previously allocated channel or resource.

Examiner respectfully directs Appellant to argument regarding this issue in previous section regarding Claim 1. Additionally, Appellant argues Kuo et al. does not disclose mobile having discontinued transmission based on power estimation and whether to maintain a channel allocation based on determining that the mobile has discontinued transmission.

Examiner respectfully disagrees. Kuo et al. discloses the base station uses the forward dedicated control channel to transmit reverse receive flags or indicator bits to indicate to mobile terminal that base station is ready to process data again over reverse supplemental communication channel R-SCH. See column 5, lines 40-46. Kuo et al. discloses the decision by base station on whether to transmit a positive or negative flag indicating to transmit or not transmit is determined using knowledge of RF conditions of its associated cell. Good RF conditions would require less attenuation of signals by base station than signals associated with bad RF conditions. Less attenuation would result in a smaller consumption of resources. See column 4, lines 52-67, column 5, lines 1-7, and column 6, lines 53-60. Examiner interprets the claimed determining discontinuous transmission based on power estimation and whether to maintain a channel allocation based on determining that the mobile has discontinued transmission with Kuo et al.'s disclosure of base station considering RF conditions, implied as power information, in communications with mobile station to determine whether to send positive or negative flag to mobile station.

Thus, rejection of Claim 8 is proper.

In the Section titled "Allowability of Claim 9", Appellant argues Kuo et al. does not disclose determining whether mobile terminal has discontinued transmission on a previously allocated channel or resource.

Examiner respectfully disagrees. Examiner would like to assert that Kuo et al.'s invention is directed towards bursty data transmission between the mobile station and base station. Examiner interprets bursty data to mean the mobile station has discontinued transmitting to base station on its reverse communication channel R-SCH for some amount of time and thus teaches claimed subject matter involving determining that mobile station has discontinued transmission. See column 5, lines 28-31 and lines 36-40. The base station uses the forward dedicated control channel to transmit reverse receive flags or indicator bits to indicate to mobile terminal that base station is ready to process data again over reverse supplemental communication channel R-SCH. See column 5, lines 40-46. Regarding the issue of determining discontinued transmission on a previously allocated channel, Examiner contends that data between the mobile station and base station is transmitted over the reverse supplemental channel R-SCH and due to the bursty or discontinuous nature of the transmission, base station is sending an indicator flag or bit to indicate to mobile station it can resume transmitting over that same R-SCH. Thus, it is the previously used reverse supplemental communication channel that will be used if mobile station has data to send after receiving indicator flag or bit.

Appellant argues Kuo et al. does not disclose determining that mobile station has discontinued transmission based on decoding a data channel.

Examiner respectfully disagrees. Examiner asserts that Kuo et al.'s invention is directed towards bursty data transmission between the mobile station and base station. Examiner interprets bursty data to mean the mobile station has discontinued transmitting to base station on its reverse communication channel R-SCH for some amount of time and thus teaches claimed subject matter involving determining that mobile station has discontinued transmission. See column 5, lines 28-31 and lines 36-40. Kuo et al. discloses input signals are processed by base station with the term “process” being construed to include encoding and decoding. See column 3, lines 57-64. Examiner interprets determined discontinued transmission based on decoding data channel in that base station recognizes bursty data communication with the mobile station due to the discontinuous decoding of transmission on R-SCH from mobile station.

Thus, rejection of claim 9 is proper.

In the Section titled “Allowability of Claim 10” and Section titled “Allowability of Claim 15”, Appellant argues that, contrary to Examiner’s assertion, Kuo et al. does not discuss determining whether a mobile terminal has discontinued transmission on an allocated channel.

Examiner respectfully disagrees. Examiner contends Kuo et al. discloses base station (claimed wireless communications device) using a discontinuous transmission technique with a mobile terminal (Figure 2, element 16-K) on a reverse link (Figure 5, element 22) to account for the bursty nature of data transmission. See column 5, lines 28-31 and lines 36-40. The base station uses the forward dedicated control channel to transmit reverse receive flags or indicator bits to indicate to mobile terminal that base station is ready to process data over reverse supplemental communication channel R-SCH. See column 5, lines 40-46. Examiner interprets determining the claimed wireless communications device has discontinued transmission on an allocated channel with Kuo et al's disclosure of bursty nature of data transmission from mobile station (claimed wireless device that has discontinued transmission on reverse supplemental communication channel R-SCH) to base station and discontinuous transmission technique to resolve this issue. The technique involves a flag being sent in order for data to continue again between the base station and mobile station. Examiner interprets bursty data to mean the mobile station has discontinued transmitting to base station on its reverse communication channel for some amount of time.

Additionally, Appellant argues the flag in Kuo et al. merely indicates when data will be sent and does not make any reference to using transmission rate control information after determining wireless communication device discontinued transmission.

Examiner respectfully disagrees. Examiner would like to point Appellant's attention to page 11 of instant specification referring to rate control information that is transmitted to wireless communication device being a single bit having a polarity attribute (positive or negative) indicating extension of channel. Examiner believes this is taught in Kuo et al. with use of flags or indicate bits to mobile station where a positive forward transmit flag having a value of 1 is transmitted to indicate mobile station can transmit data to base station and a negative flag with value of 0 means no data can be sent. See column 5, lines 40-46, lines 62-67, and column 6, lines 1-9.

Thus, the rejections of claims 10 and 15 are proper.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Melanie Jagannathan 2/21/06

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Conferees:

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